

ABSTRACT

[00114] The invention provides novel anthraquinone compositions that are useful as broad-spectrum quenchers of fluorescence and provides methods for making and using them. The anthraquinone quenchers can be conjugated to a variety of biologically relevant compounds, including lipids, nucleic acids, polypeptides, and more specifically antigens, steroids, vitamins, drugs, haptens, metabolites, toxins, environmental pollutants, amino acids, peptides, proteins, nucleotides, oligonucleotides, polynucleotides, carbohydrates, and their analogs. The invention also provides kits comprising, in one or more containers, at least one anthraquinone quencher dye composition of the present invention, and instructions for using that composition.